

10/562,018

<http://www.cas.org/support/stngen/stndoc/properties.html>

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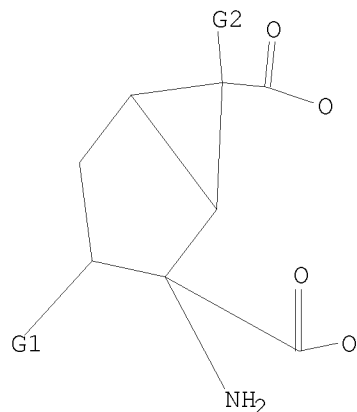
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L1 STRUCTURE UPLOADED

=> d

L1 HAS NO ANSWERS

L1 STR



G1 O, S, N

G2 X, H

Structure attributes must be viewed using STN Express query preparation.

=> s l1 sss full

THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 191.05 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y

FULL SEARCH INITIATED 14:07:40 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 558 TO ITERATE

100.0% PROCESSED 558 ITERATIONS

332 ANSWERS

SEARCH TIME: 00.00.01

L2 332 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

191.54

191.76

FILE 'CAPLUS' ENTERED AT 14:07:51 ON 28 MAR 2010

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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10/923,271

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FILE COVERS 1907 - 28 Mar 2010 VOL 152 ISS 14
FILE LAST UPDATED: 26 Mar 2010 (20100326/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

CAPLUS now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12

L3 30 L2

=> s 13 and py<2003

22998523 PY<2003

L4 4 L3 AND PY<2003

=> d 1-4 ibib abs hitstr

THE ESTIMATED COST FOR THIS REQUEST IS 23.24 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:851222 CAPLUS

DOCUMENT NUMBER: 138:198858

TITLE: Molecular docking of ligands of glutamate receptors

AUTHOR(S): Belenikin, M. S.; Makkiarulo, A.; Konstantino, G.;

Palyulin, V. A.; Pellichari, P.; Zefirov, N. S.

CORPORATE SOURCE: Kafedra Org. Khim., Mosk. Gos. Univ., Moscow, Russia

SOURCE: Vestnik Moskovskogo Universiteta, Seriya 2: Khimiya (2002), 43(4), 221-230

CODEN: VMUKA5; ISSN: 0579-9384

PUBLISHER: Izdatel'stvo Moskovskogo Universiteta

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB Docking of a number of agonists and antagonists into glutamate-binding sites of human metabotropic and ionotropic glutamate receptors was modeled using the computer program AutoDock 3.0. The three-dimensional structures of the ligand-receptor complexes were in good agreement with exptl. data. Effect of water mols. at the ligand-binding site of the receptor on the ligand orientation was studied.

IT 259134-85-5

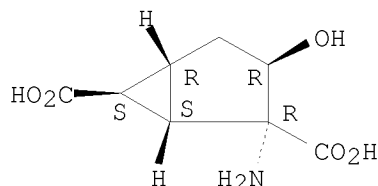
10/923,271

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)
(modeling of mol. docking of ligands of human metabotropic and
ionotropic glutamate receptors)

RN 259134-85-5 CAPLUS

CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3-hydroxy-,
(1S,2R,3R,5R,6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:10425 CAPLUS

DOCUMENT NUMBER: 136:85627

TITLE: Preparation of bicyclo[3.1.0]dicarboxylic acid
derivatives as group 2 metabotropic glutamate receptor
agonists

INVENTOR(S): Nakazato, Atsuro; Kumagai, Toshihito; Kanuma, Kosuke;
Sakagami, Kazunari

PATENT ASSIGNEE(S): Taisho Pharmaceutical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

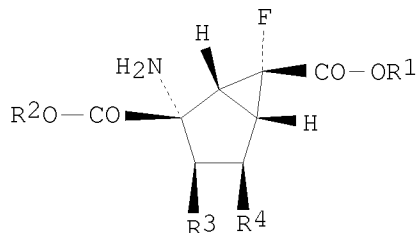
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
AU 2001067854	A	20020108	AU 2001-67854	20010628 <--
CA 2411059	A1	20021206	CA 2001-2411059	20010628 <--
EP 1295865	A1	20030326	EP 2001-945657	20010628
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
CN 1216038	C	20050824	CN 2001-811723	20010628
AU 2001267854	B2	20051201	AU 2001-267854	20010628
US 20030134902	A1	20030717	US 2002-297479	20021206

10/923,271

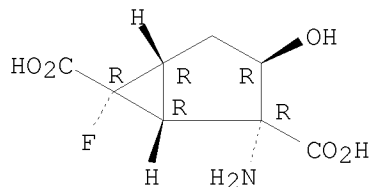
US 6770676 B2 20040803
HK 1056868 A1 20051202 HK 2003-109245 20031219
PRIORITY APPLN. INFO.: JP 2000-195239 A 20000628
WO 2001-JP5550 W 20010628
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
OTHER SOURCE(S): MARPAT 136:85627
GI



I

AB 2-Amino-6-fluorobicyclo[3.1.0]hexane-2,6-dicarboxylic acid derivs.
represented by the general formula I [R1, R2 = H, alkyl, etc.; when R3 is
OH, R4 is H; or R3R4 = bond] are prepared These compds. are useful as
drugs, in particular, group 2 metabotropic glutamate receptor agonists
having therapeutic and preventive effects on, for example, psychiatric
diseases such as schizophrenia, anxiety, etc.
(1R,2R,3R,5R,6R)-2-Amino-6-fluoro-3-hydroxybicyclo[3.1.0]hexane-2,6-
dicarboxylic acid was prepared and its bioactivity was demonstrated.
IT 385372-18-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of bicyclo[3.1.0]dicarboxylic acid derivs. as group 2
metabotropic glutamate receptor agonists)
RN 385372-18-9 CAPLUS
CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-6-fluoro-3-hydroxy-,
(1R,2R,3R,5R,6R)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

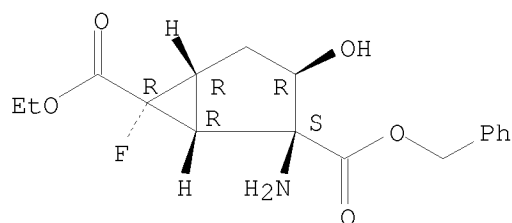


IT 385372-31-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of bicyclo[3.1.0]dicarboxylic acid derivs. as group 2
metabotropic glutamate receptor agonists)

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RN 385372-31-6 CAPLUS
CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-6-fluoro-3-hydroxy-,
6-ethyl 2-(phenylmethyl) ester, (1R,2S,3R,5R,6R)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD
(8 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2000:157966 CAPLUS
DOCUMENT NUMBER: 132:166520
TITLE: Stereospecific synthesis of
2-amino-bicyclo[3.1.0]hexan-2,6-dicarboxylic acid
derivatives for use as metabotropic glutamate receptor
ligands
INVENTOR(S): Adam, Geo; Huguenin-Virchaux, Philippe Nicolas; Mutel,
Vincent; Stadler, Heinz; Woltering, Thomas Johannes
PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.
SOURCE: Ger. Offen., 22 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19941675	A1	20000309	DE 1999-19941675	19990901 <--
CH 694053	A5	20040630	CH 1999-1550	19990824
US 6107342	A	20000822	US 1999-385935	19990830 <--
CA 2281272	A1	20000303	CA 1999-2281272	19990831 <--
GB 2341179	A	20000308	GB 1999-20579	19990831 <--
GB 2341179	B	20040218		
JP 2000086597	A	20000328	JP 1999-244167	19990831 <--
JP 3340409	B2	20021105		
SE 9903088	A	20000304	SE 1999-3088	19990901 <--
SE 520026	C2	20030513		
FR 2786768	A1	20000609	FR 1999-10971	19990901 <--
FR 2786768	B1	20041015		
IT 99MI1860	A1	20010301	IT 1999-MI1860	19990901 <--
IT 1313618	B1	20020909		
NL 1012963	A1	20000306	NL 1999-1012963	19990902 <--
NL 1012963	C2	20031023		

10/923,271

AU 9947327	A	20000316	AU 1999-47327	19990902 <--
AU 757939	B2	20030313		
AT 501853	A1	20061115	AT 1999-1514	19990902
BE 1014616	A3	20040203	BE 1999-595	19990903

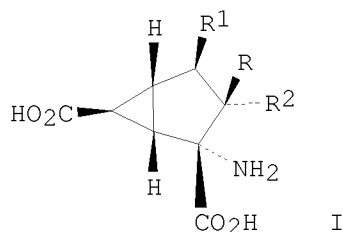
PRIORITY APPLN. INFO.:

EP 1998-116670 A 19980903

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 132:166520

GI



AB Title compds. [(I); R = OH, alkoxy, alkenyloxy, PhCH₂O-, H, 2H, 3H; R¹ = H, 3H; R, R¹ = bond; R² = H, 2H, 3H, OH, NH₂] were stereospecifically prepared for use in treatment of neurol. conditions and psychiatric disturbances (no data). Thus, racemic Et (1 α , 5 α , 6 α)-2-oxo-bicyclo[3.1.0]hexane-6-carboxylic acid was reacted with Ph bis((trifluoromethyl)sulfonyl)amine and the resulting triflate transformed into the racemic 2-ethyl-6-benzyl bicyclo[3.1.0]hex-2-ene-2,6-dicarboxylic acid, reaction of which with K₂[OsO₂(OH)₄] gave stereospecifically the 1S,2S,3R,6S-diol, which could be isolated in 26% yield, at >99% enantiomeric excess. Preparation of the 2R-2-azido compound from the diol through a cyclic sulfate gave an intermediate which could then be alkylated, aminated, hydrogenated, de-esterified, or otherwise treated to give I, for use as ligands for metabotropic glutamate group II receptors.

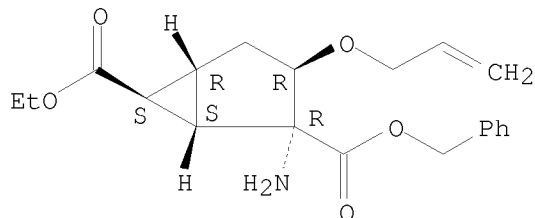
IT 259134-78-6P 259134-79-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(stereospecific synthesis of 2-amino-bicyclo[3.1.0]hexan-2,6-dicarboxylic acid derivs. for use as metabotropic glutamate receptor ligands)

RN 259134-78-6 CAPLUS

CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3-(2-propen-1-yloxy)-, 6-ethyl 2-(phenylmethyl) ester, (1S,2R,3R,5R,6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

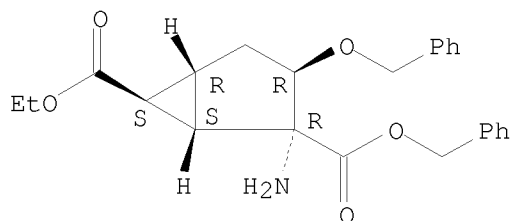


10/923,271

RN 259134-79-7 CAPLUS

CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3-(phenylmethoxy)-, 6-ethyl 2-(phenylmethyl) ester, (1S,2R,3R,5R,6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



IT 259134-85-5P 259134-86-6P 259134-87-7P

259134-88-8P 259134-89-9P 259134-94-6P

259134-95-7P 259134-96-8P 259134-97-9P

259134-98-0P 259135-00-7P

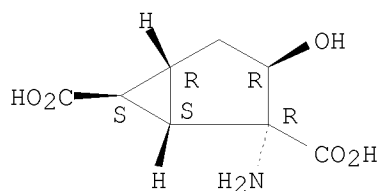
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(stereospecific synthesis of 2-amino-bicyclo[3.1.0]hexan-2,6-dicarboxylic acid derivs. for use as metabotropic glutamate receptor ligands)

RN 259134-85-5 CAPLUS

CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3-hydroxy-, (1S,2R,3R,5R,6S)- (CA INDEX NAME)

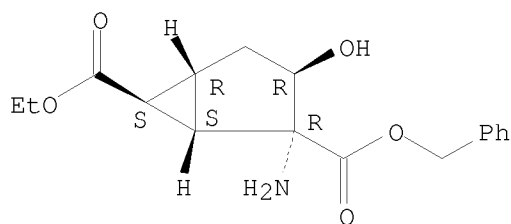
Absolute stereochemistry. Rotation (+).



RN 259134-86-6 CAPLUS

CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3-hydroxy-, 6-ethyl 2-(phenylmethyl) ester, (1S,2R,3R,5R,6S)- (CA INDEX NAME)

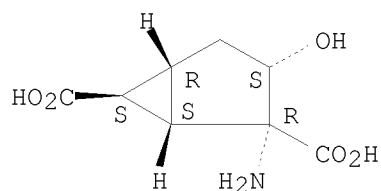
Absolute stereochemistry.



10/923,271

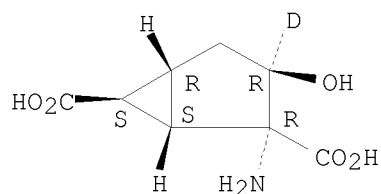
RN 259134-87-7 CAPLUS
CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3-hydroxy-,
(1S,2R,3S,5R,6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



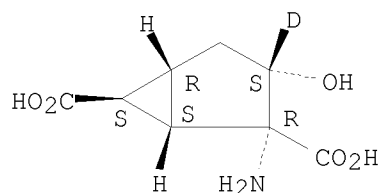
RN 259134-88-8 CAPLUS
CN Bicyclo[3.1.0]hexane-3-d-2,6-dicarboxylic acid, 2-amino-3-hydroxy-,
(1S,2R,3R,5R,6S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 259134-89-9 CAPLUS
CN Bicyclo[3.1.0]hexane-3-d-2,6-dicarboxylic acid, 2-amino-3-hydroxy-,
(1S,2R,3S,5R,6S)- (9CI) (CA INDEX NAME)

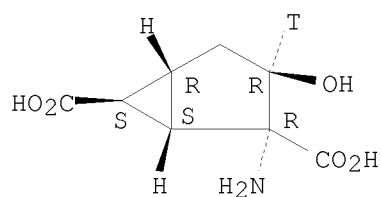
Absolute stereochemistry. Rotation (+).



RN 259134-94-6 CAPLUS
CN Bicyclo[3.1.0]hexane-3-t-2,6-dicarboxylic acid, 2-amino-3-hydroxy-,
(1S,2R,3R,5R,6S)- (CA INDEX NAME)

Absolute stereochemistry.

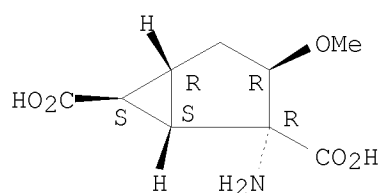
10/923,271



RN 259134-95-7 CAPLUS

CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3-methoxy-,
(1S,2R,3R,5R,6S)- (CA INDEX NAME)

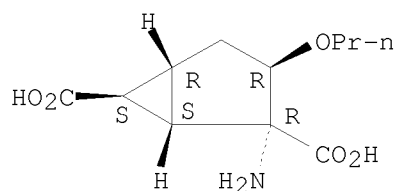
Absolute stereochemistry. Rotation (+).



RN 259134-96-8 CAPLUS

CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3-propoxy-,
(1S,2R,3R,5R,6S)- (CA INDEX NAME)

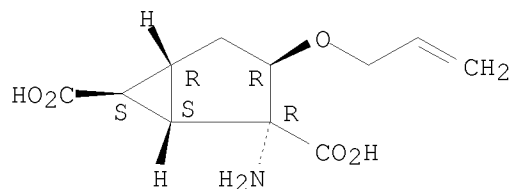
Absolute stereochemistry. Rotation (-).



RN 259134-97-9 CAPLUS

CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3-(2-propen-1-yloxy)-,
(1S,2R,3R,5R,6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



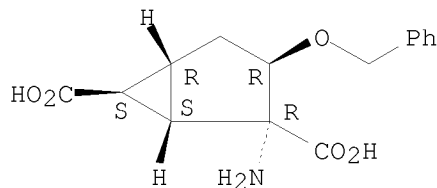
RN 259134-98-0 CAPLUS

CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3-(phenylmethoxy)-,

10/923,271

(1S,2R,3R,5R,6S)- (CA INDEX NAME)

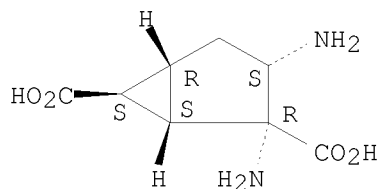
Absolute stereochemistry. Rotation (-).



RN 259135-00-7 CAPLUS

CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2,3-diamino-,
(1S,2R,3S,5R,6S)- (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS
RECORD (28 CITINGS)

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:68447 CAPLUS

DOCUMENT NUMBER: 132:93652

TITLE: Preparation of
2-aminobicyclo[3.1.0]hexane-2,6-dicarboxylates and
related compounds as pharmaceutical intermediates and
modulators of metabotropic glutamate receptor
function.

INVENTOR(S): Baker, Stephen Richard; Monn, James Allen; Ezquerra
Carrera, Jesus; Dominguez Fernandez, Carmen

PATENT ASSIGNEE(S): Eli Lilly and Company Limited, UK; Lilly, S.A.; Eli
Lilly and Company

SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

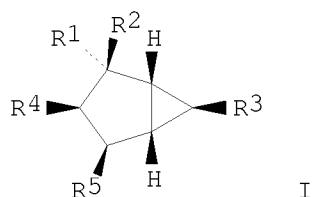
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000004010	A1	20000127	WO 1999-GB2273	19990714 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,				

MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,
 TR, TT, UA, UG, US, UZ, VN, YU, ZW
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 CA 2338054 A1 20000127 CA 1999-2338054 19990714 <--
 AU 9949223 A 20000207 AU 1999-49223 19990714 <--
 EP 1097149 A1 20010509 EP 1999-933048 19990714 <--
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, FI
 JP 2002520406 T 20020709 JP 2000-560116 19990714 <--
 PRIORITY APPLN. INFO.: GB 1998-15542 A 19980717
 WO 1999-GB2273 W 19990714
 OTHER SOURCE(S): MARPAT 132:93652
 GI



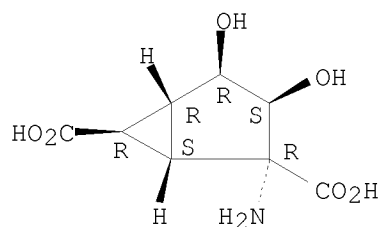
AB Title compds. [I; either R1 = N3, (protected) amino; R2 = (protected) carboxy; or R1 = trihalomethyl; R2 = OH; R3 = (protected) carboxy; either R4 = OR6 and R5 = OR7; or R4 and R5 = H or R4R5 = bond; ether R6 and R7 = H; or R6R7 = diol protecting group; provided that when R4 and R5 = H, R1 ≠ amino], were prepared s pharmaceutical intermediates and modulators of metabotropic glutamate receptor function (no data). Thus, ethoxycarbonylmethyltrimethylsulfonium bromide in CHCl₃ was treated with DBU and then with (-)-2,3-(cyclohexylidenedioxy)-4-cyclopentenone in CHCl₃ followed by stirring overnight to give 96% Et (1S,3R,4R,5R,6S)-2-oxo-3,4-cyclohexylidenedioxybicyclo[3.1.0]hexane-6-carboxylate. This with CHCl₃ in THF at -78° was treated with Li hexamethyldisilazide in THF followed by warming to room temperature to give 94% Et (1S,2S,3R,4R,5R,6S)-2-trichloromethyl-2-hydroxy-3,4-cyclohexylidenedioxybicyclo[3.1.0]hexane-6-carboxylate. Treatment of the latter with NaN₃, 18-crown-6, and DBU in MeOH over 6 h gave 84% di-Me (1S,2R,3S,4R,5R,6S)-2-azido-3,4-cyclohexylidenedioxybicyclo[3.1.0]hexane-2,6-dicarboxylate. This was hydrogenated in EtOAc over Pd/C to give 71% of the corresponding amine, which was converted to (1S,2R,3S,4R,5R,6R)-2-amino-3,4-dihydroxybicyclo[3.1.0]hexane-2,6-dicarboxylic acid in several steps.

IT 254982-42-8P 254982-43-9P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of 2-aminobicyclo[3.1.0]hexane-2,6-dicarboxylates and related compds. as pharmaceutical intermediates and modulators of metabotropic glutamate receptor function)

10/923,271

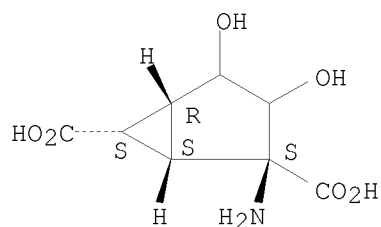
RN 254982-42-8 CAPLUS
CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3,4-dihydroxy-,
(1S,2R,3S,4R,5R,6R)- (CA INDEX NAME)

Absolute stereochemistry.



RN 254982-43-9 CAPLUS
CN Bicyclo[3.1.0]hexane-2,6-dicarboxylic acid, 2-amino-3,4-dihydroxy-,
(1S,2S,5R,6S)- (CA INDEX NAME)

Absolute stereochemistry.



OS.CITING REF COUNT:	3	THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)
REFERENCE COUNT:	1	THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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